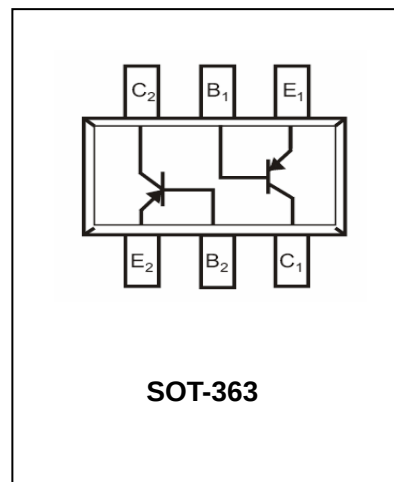


Dual PNP Small Signal Surface Mount Transistor

BC857S

FEATURES

- Epitaxial planar die construction.
- Complementary NPN type available BC847S.
- Ultra-small surface mount package.



APPLICATIONS

- For Low power amplification and switching.

ORDERING INFORMATION

Type No.	Marking	Package Code
BC857S	3C	SOT-363

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-200	mA
P_D	Power Dissipation	300	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	415	°C/W
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	°C



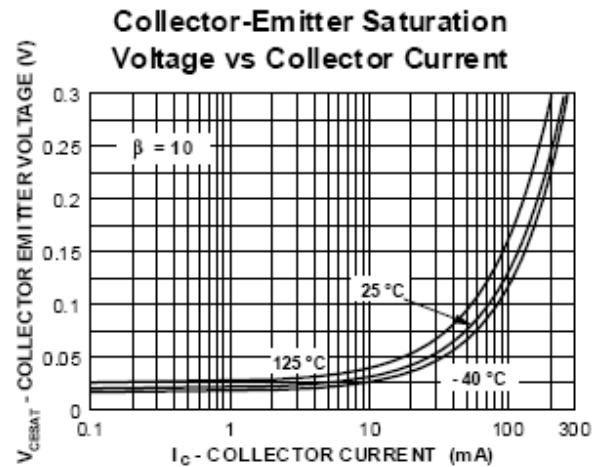
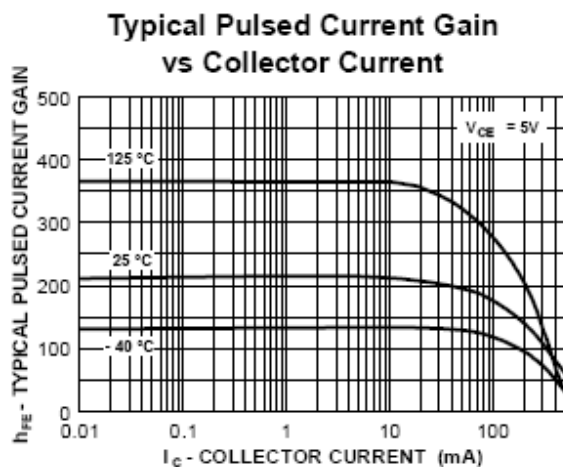
Dual PNP Small Signal Surface Mount Transistor

BC857S

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

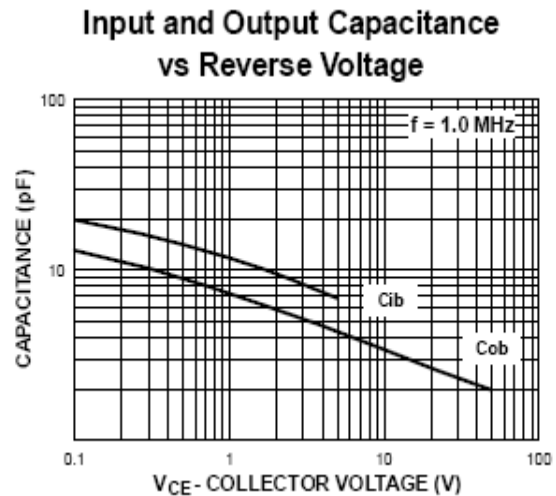
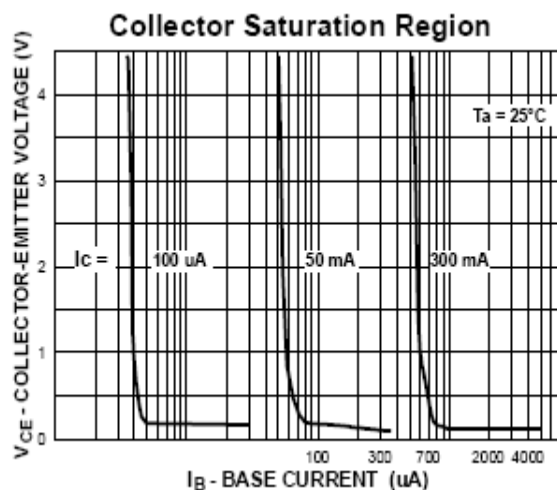
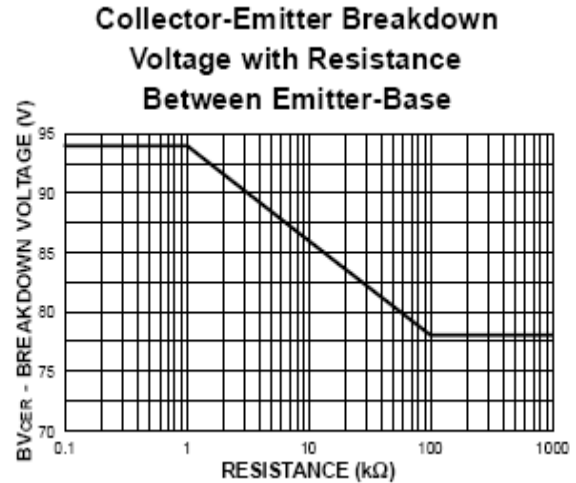
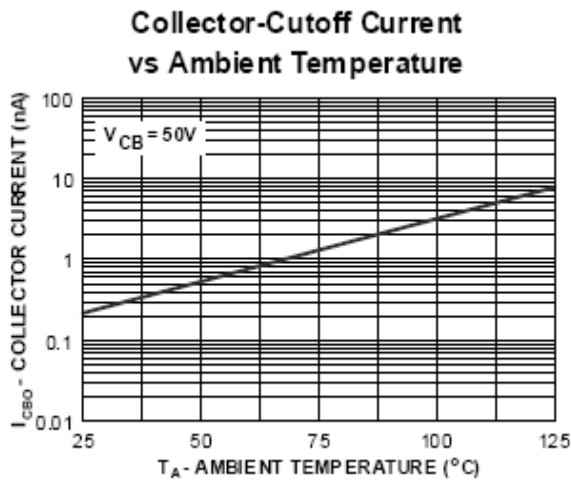
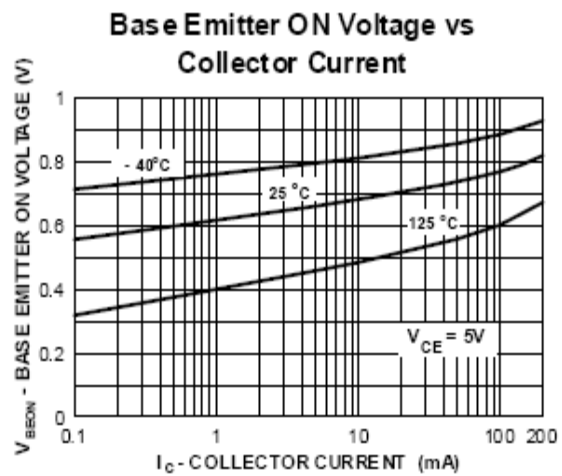
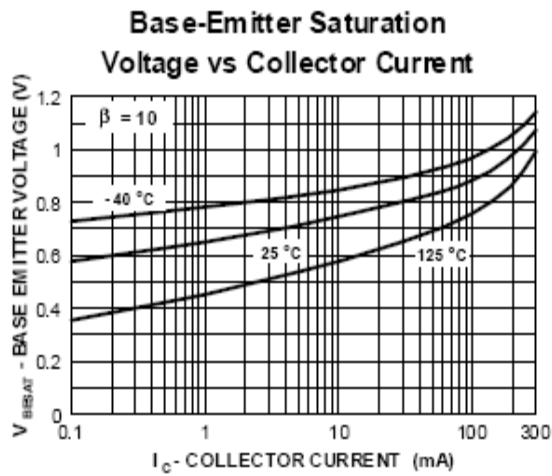
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A$ $I_E = 0$	-50	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA$ $I_B = 0$	-45	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A$ $I_C = 0$	-5	-	V
Collector cut-off current	I_{CBO}	$V_{CB} = -30V$ $I_E = 0$ $V_{CB} = -30V$ $I_E = 0$ $T_A = 150^\circ C$	-	-15 -4.0	nA μA
DC current gain	h_{FE}	$V_{CE} = -5V$ $I_C = -2.0mA$	125	630	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10mA$ $I_B = -0.5mA$ $I_C = -100mA$ $I_B = -5.0mA$	-	-0.3 -0.65	V
Base-emitter on voltage	$V_{BE(on)}$	$I_C = -2.0mA$ $V_{CE} = -5.0V$ $I_C = -10mA$ $V_{CE} = -5.0V$	-0.6	-0.75 -0.82	V
Transition frequency	f_T	$V_{CB} = -5.0V$, $I_C = -10mA$, $f = 100MHz$	200		MHz
Output Capacitance	C_{obo}	$V_{CB} = -10V$, $f = 1.0MHz$	-	3.5	pF
Noise figure	NF	$I_C = 0.2mA$, $V_{CE} = 5.0$, $R_S = 2.0K\Omega$, $f = 1.0kHz$, $BW = 200Hz$		2.5	dB

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



Dual PNP Small Signal Surface Mount Transistor

BC857S



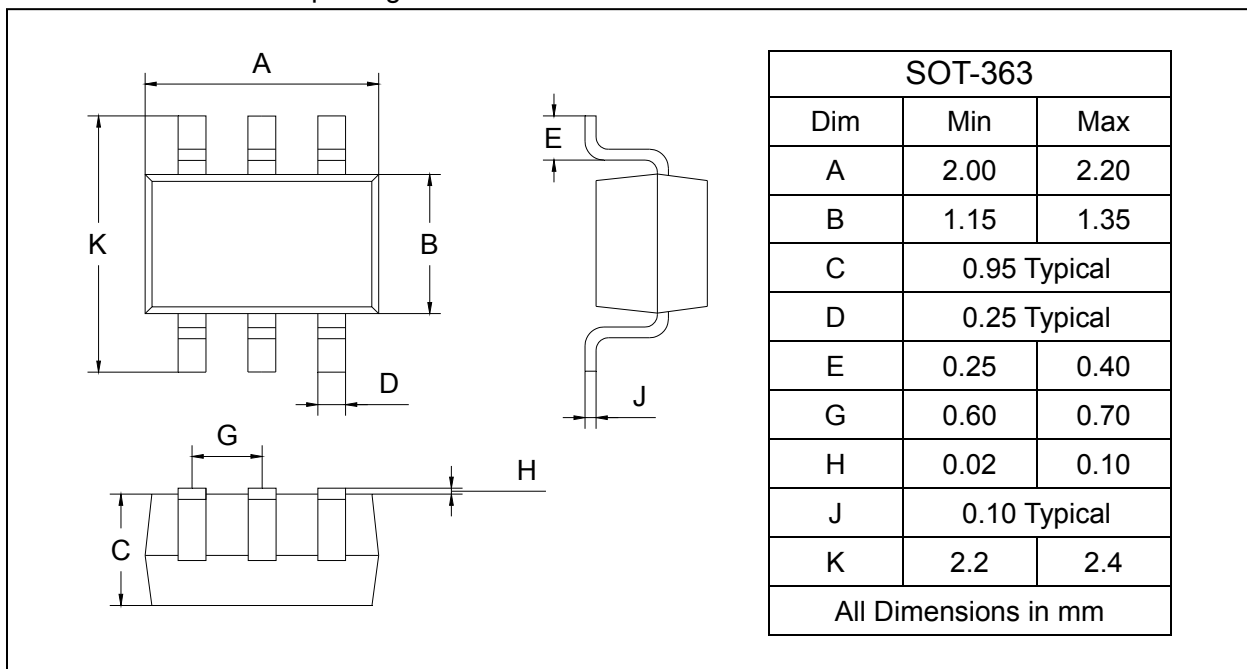
Dual PNP Small Signal Surface Mount Transistor

BC857S

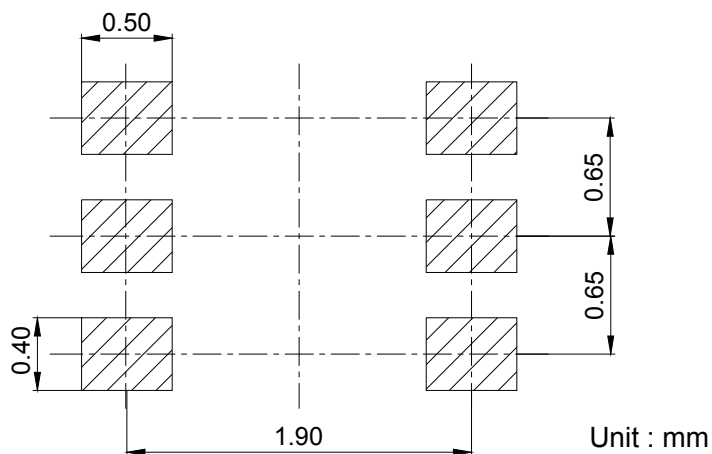
PACKAGE OUTLINE

Plastic surface mounted package

SOT-363



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BC857S	SOT-363	3000/Tape&Reel